

# Delaware Management of Public Ponds

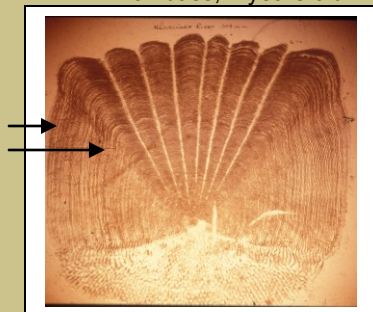


*D. Raver, US FWS*

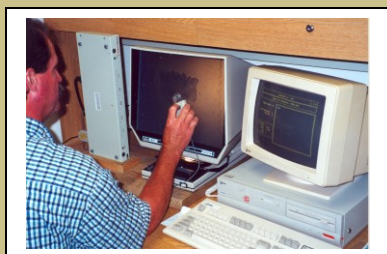
## Sampling pond fish via electrofisher



Scales tell the story...  
A 12 inch bass, 2 years old



## Examining a fish scale for age & growth



For more information on the  
Public pond survey contact:

Cathy Martin  
Fisheries Biologist  
4876 Hay Point Landing Rd.  
Smyrna, DE 19977  
(302) 735-8658

[catherine.martin@state.de.us](mailto:catherine.martin@state.de.us)

The Division of Fish and Wildlife manages the fish populations of 33 public ponds ranging in size from 4.8 acres (Tubmill) to nearly 200 acres (Lums). Each pond is sampled at least once every five years to determine the status of the fish population. Generally three timed samples (300 seconds each) are conducted via electrofisher and all fish species are collected. Additional sampling effort is expended to collect gamefish such as largemouth bass, crappie, bluegill, and other panfish. All fish are measured and weighed.

Scale samples are taken from many fish. These can be viewed using a standard microfiche reader and the age of the fish determined as well as how well the fish has been growing. The number of each kind of fish caught is divided by the sampling time to give a value of catch per unit of effort (CPUE) or number of fish per hour. This allows comparisons between locations and between years. For example, the statewide CPUE of black crappie is 82.2 crappie per hour but catches at ponds range from 1.7 to 440. Periodic monitoring of the fish populations allows Division biologists to determine the need for active management such as thinning over-abundant crappie.

Sometimes crappie produce high numbers of young which survive and grow. If they reach the point where there is not sufficient food for all; most cannot grow any larger and become stunted. This is so common that it is referred to as "small crappie syndrome". The best way to improve the situation is to remove a portion of those stunted fish. Here in Delaware, we have found that using the electrofisher to collect the fish is most efficient. Fish within the stunted size group are generally stocked in the spillpool below the pond. Management results in Trap and Killens Pond have been very good with crappie growth and number of larger individuals increasing.

Another aspect of the program is determining the impact of redear sunfish on resident fish populations. Redear sunfish (bottom left) were introduced to Delaware fairly recently and have been spreading through the ponds, likely at the hands of anglers. However, it has not yet been determined if this will harm the bass and bluegill populations currently present. Growth, abundance and food habits of redear are being monitored to find out.



Redear sunfish (left) are found in some DE ponds, but bluegill (above) are residents of all public ponds. Redear have been introduced to Trap, Records, Wagamons, and Silver Lake (Milford) by anglers.